

Work Order ID 158170***158170***

Page 1

Monday, March 13, 2017 10:45:24 AM

Item ID: D3319-3

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Full Length Wearplate

Start Date: 3/13/2017 Start Qty: 10.00

10

Cust Item ID:

Required Date: 3/17/2017 Req'd Qty: 10.00

10

Customer:

Reference: SCHEDULE/S

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D3319	C

100

0.00

100

Waterjet

FLOW CNC Waterjet

FLOW WATER JET

Memo

1-Cut as per Dwg D3319

Dwg Rev: CProg Rev: C

2-Deburr if necessary

0.32

(10)

02/17/03/13

110

0.00

110

QC

Quality Control

QC2- Inspect parts off machine FAI/FAIB

Memo

0.02

(10)

02/17/03/13

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only ☐

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Work Order ID 158170

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158170

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Item ID: D3319-3 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Full Length Wearplate
Start Date: 3/13/2017 Start Qty: 10.00 ***10*** Cust Item ID:
Required Date: 3/17/2017 Req'd Qty: 10.00 ***10*** Customer:
Reference: SCHEDULE/S

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 *160* Large Fab Large Fab	Weld per dwg A/R Hardcoat steel Batch: _____ Large Fab Memo Weld hard surface using D3319-3T2 per QSI 004 and Dwg D3319 Batch A/R 7560 Hardcoat Rod <u>4136419</u>	0.00 0.48				(10)		DYC 17/03/17	
170 *170* QC Quality Control	QC10- Inspect visual per QSI004- ground welds Memo	0.00 0.00				10			DAS 38 9-89 MAR 17 2017
180 *180* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.03				10			DAS 38 9-89 MAR 17 2017

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190 *190* Powdercoat Powder Coating	Grey Sandtex(Ref:4.3.5.6) per OSI005 4.3 <i>17 134858</i> Memo START TIME: <i>1:40.</i> OVEN TEMPERATURE: <i>200</i> FINISH TIME: <i>2:10.</i>	0.00 0.03				<i>10</i>	<i>0</i>	<i>17-03-23</i>	<i>3308</i>
200 *200* QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.02				<i>10</i>			<i>DAS 38 9-88</i> <i>MAR 24 2017</i>
210 *210* Packaging Packaging	Packaging Memo Identify on inside surface using a permanent fine point marker with the following:TCCA-PDA, Dart Aerospace Ltd.P/N: D3319-3, B/N: BXXXXXFor Product Eligibility see PDA05-18 and Stock Location: <i>ST260B</i>	0.00 0.00				<i>MAR 29 2017</i> <i>DAS 610 9-88</i>			<i>DAS 41 9-88</i> <i>MAR 27 2017</i>

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OTHER : ☐																																																																									

Work Order ID 158170

Monday, March 13, 2017 10:45:24 AM

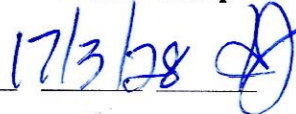
158170

Page 5

Item ID: D3319-3 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Full Length Wearplate
Start Date: 3/13/2017 Start Qty: 10.00 ***10*** Cust Item ID:
Required Date: 3/17/2017 Req'd Qty: 10.00 ***10*** Customer:
Reference: SCHEDULE/S

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
220	QC21- Final Inspection - Work Order Release	0.00							
220									
QC	Memo	0.17							
Quality Control									

17/3/28 

MAR 28 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																		
Large Fab ☐	Composite ☐	Supplier ☐																			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval																	
Description Work Order Deviation		Disposition		Completed By																	
				Lead hand / Supervisor Approval Verification																	
				QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐																
OTHER : _____																					

Picklist Print

Monday, March 13, 2017 10:45:24 AM

Page 1

Work Order ID: 158170

158170

Parent Item: D3319-3

D3319-3

Parent Item Name: Full Length Wearplate

Start Date: 3/13/2017

Required Date: 3/17/2017

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP: A05.05.12New issueKJ/JLM
IPP Rev:B Now on Waterjet 06-10-03 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M1010S18GA		Purchased	No			100	sf	101.0000	3.2524	34.23579			

M1010S18GA

1010/1025 SHEET .048

**

02/17/03/13

Location

Loc Qty

Loc Code

MAT019

100.999952

m136340

37

m136896

32

m137041

32

27

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:12.5%;">Skid-tube ☐</td> <td style="width:12.5%;">Cross tube ☐</td> <td style="width:12.5%;">Water Jet ☐</td> <td style="width:12.5%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
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Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐																				
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Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____																							
Misidentified ☐	Past Due ☐																								

DART AEROSPACE LTD		Work Order:	158170
Description: Wearplate		Part Number:	D3319-3
Inspection Dwg: D3319	Rev: C	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.190	+0.005/-0.001	Ø.193	1		Viper-02	
Ø0.500	+0.006/-0.001	Ø.499	1		T-p	
0.316	+/-0.010	.315	1			
0.607	+/-0.010	.608	1			
2.94	+/-0.030	2.94	1			
2.69	+/-0.030	2.69	1			
3.527	+/-0.010	3.525	1			
4.52	+/-0.030	4.52	1			
5.063	+/-0.010	5.060	1			
6.16	+/-0.030	6.16	1			
0.60	+/-0.030	.60	1			
8.690	+/-0.010	8.689	1			
30.790	+/-0.010	30.790	1			
52.88	+/-0.030	52.88	1			
62.770	+/-0.010	62.770	1			
74.420	+/-0.010	74.420	1			
75.52	+/-0.030	75.52	1			
0.050	+/-0.010	.046	1			

Measured by:	ac	Audited by:	DAS 38	Preliminary Approval:	
Date:	17/03/13	Date:	MAR 15 2017	Date:	

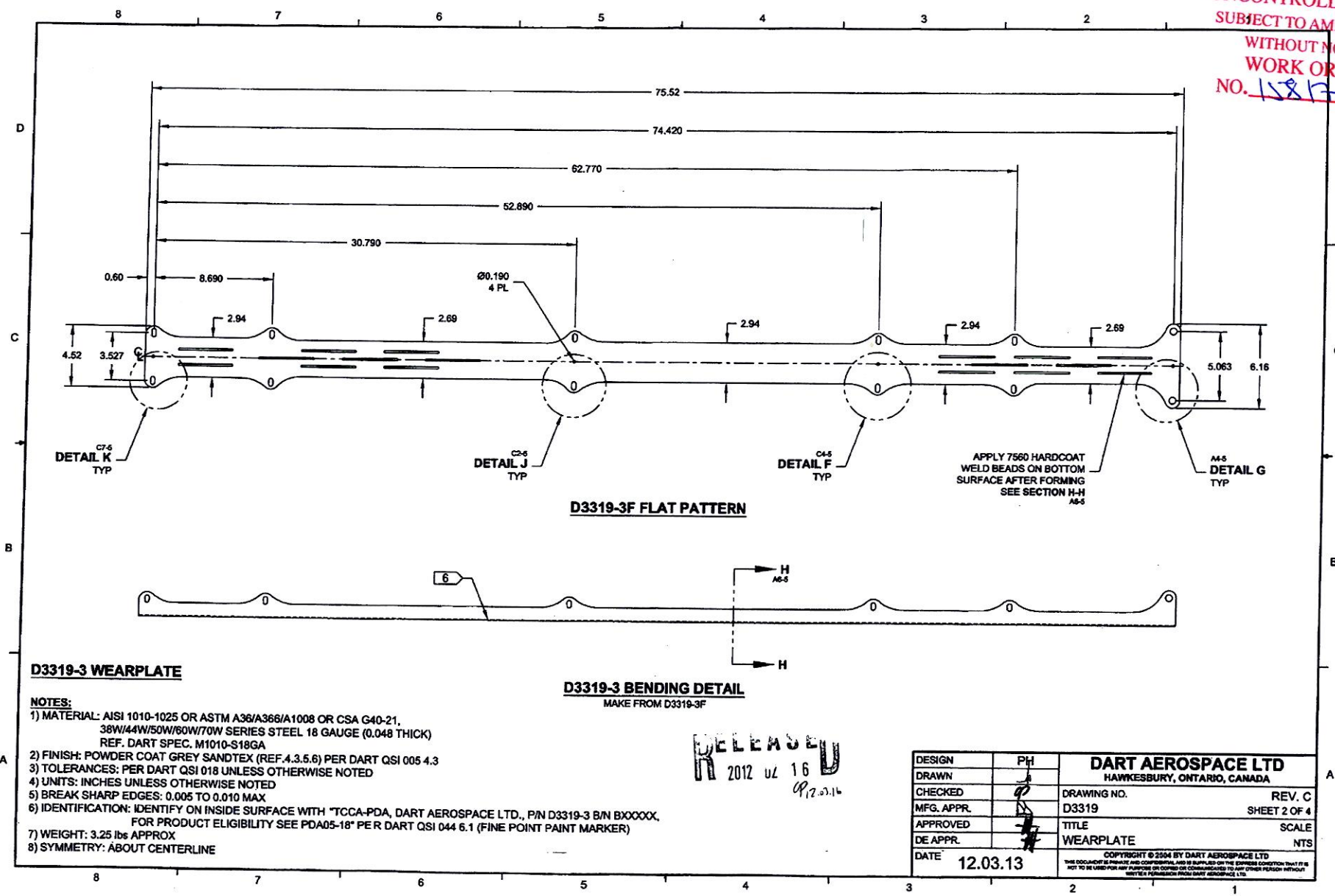
Rev	Date	Change	Revised by	Approved
A	07.07.18	New Issue	KJ/JLM	
B	12.05.15	Dimensions updated per Dwg Rev C	KJ	

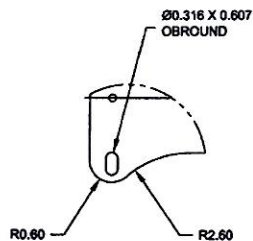
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT

WITHOUT NOTICE
WORK ORDER

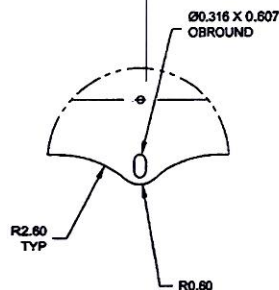
NO. 158170 MWS

1705

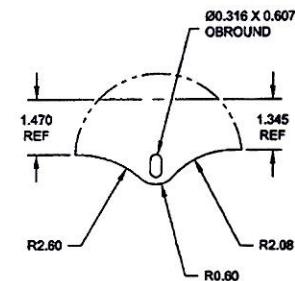




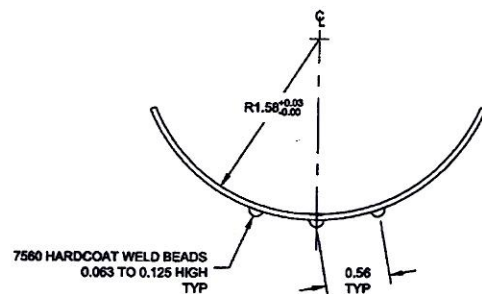
DETAIL K
SCALE 2X
B3-2
C4-3
C5-3



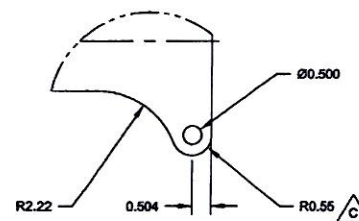
DETAIL F
SCALE 2X
B3-2



DETAIL J
SCALE 2X
B3-2
C7-3



SECTION H-H
SCALE 4X
B4-2
B3-3
B6-3



DETAIL G
SCALE 2X
B3-2
C2-3
C6-3
C

RELEASED
2012-02-16
412.03.16

DESIGN	PH	DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3319	SHEET 4 OF 4
APPROVED		TITLE	SCALE
DE APPR.		WEARPLATE	NTS
DATE	12.03.13	COPYRIGHT © 2004 BY DART AEROSPACE LTD THIS DOCUMENT IS PRINTED AND CONTAINS, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	